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REMARKS

SPECIFICATION:

37 C.F.R. 177(a)

The Examiner objected to the title as being boldfaced.

Accordingly, Applicant has changed both instances of the title from BOLD to UNBOLD. Applicant respectfully submits that no new matter has been added.

Abstract re MPEP 608.01(b)

The Examiner objected to the Abstract as exceeding 150 words.

Accordingly, Applicant has amended the Abstract to now comprise 145 words. Applicant respectfully submits that no new matter has been added.

CLAIMS:

Claims 1-50 comprise the case.

35 U.S.C. 103

Claims 1-50 have been rejected as being unpatentable over Schneck et al. (U.S.P. 5,993,498) in view of Davis (U.S.P. 4,941,201) under 35 U.S.C. 103(a):

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A) Claims 1, 15, 29 and 40:

As to independent Claim 1, the Examiner states "Schneck et al. teaches the computer processor having a user table comprising at least a unique identifier for each authorized user and at least one permitted activity ***, the user identifier, when combined with a user authentication message from the authorized user ***, authorizes the user; the processor *** combining the user authentication message with the user identifier from the user table in accordance with the predetermined algorithm to authorize or deny the user activity, and the user authorization or denial to the data storage drive ***. *** Davis teaches a *** portable security system comprising: a wireless interface ***; and a computer processor mounted in the portable data storage cartridge ***. Therefore, it would have been obvious *** to have modified Schneck et al. To include a portable security system for managing access to a portable data storage cartridge ***."

The Examiner makes similar statements regarding independent Claims 15, 29 and 40.

1) However, Applicant respectfully submits that neither Schneck et al. nor Davis show or suggest any "computer processor mounted in said portable data storage cartridge" (emphasis added) that conducts authentication or authorization of a user as defined by Claim 1.

Rather, as pointed out by the accompanying Declaration under Rule 1.132, "Davis shows a data storage device with CMOS logic that stores and addresses data, without any user authentication.

*** Schneck shows a data distribution system where the user access mechanism and the data are external to each other, and the decryption is at the access mechanism, which is in a secure environment of the using processor, not with the data. *** Having the computer processor with the portable data in the cartridge

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[of the present `899 application] makes the authentication of the user totally portable."

2) Further, neither Schneck et al. nor Davis shows or suggests "a user table comprising at least a <u>unique user identifier</u> for each authorized user and at least one permitted activity said user is authorized to conduct ***, <u>when combined with a user authentication message from said authorized user</u> in accordance with a predetermined algorithm, <u>authorizes said user</u>" (emphasis added) as defined in Claim 1.

Rather, as pointed out by the accompanying Declaration under Rule 1.132, "Davis shows an address-like initialization access code to address a particular memory location of the device, but shows nothing directed to a user identifier. *** Schneck shows a passive use of 'a particular user or group or class of users' in a 'permission list' of the rules, but shows no user identifier for enabling authorization." (Emphasis added).

3) Still further, neither Schneck et al. nor Davis shows or suggests "said computer processor having a user table comprising at least a unique user identifier for each authorized user and at least one permitted activity said user is authorized to conduct with respect to said data storage media" (emphasis added) as defined in Claim 1.

Rather, as pointed out by the accompanying Declaration under Rule 1.132, "Davis shows an address-like initialization access code to address a particular memory location of the device, but shows no user authentication or decryption. *** Schneck shows a data usage control with fixed singular 'rules' relative to distribution and use of the data, but does not allow a user to do anything with respect to the media. Rather, the 'authoring mechanism' has control over the media, and is in a secure environment, separate from the secure environment of the user." (Emphasis added).

4) Still further, since neither Schneck et al. nor Davis show or suggest any "computer processor mounted in said portable data

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storage cartridge" (emphasis added) that conducts authentication or authorization, as discussed above, it is not possible for either Schneck et al. nor Davis to show or suggest "transmitting said user authorization or denial to said data storage drive via said wireless interface" as defined in Claim 1.

The same points apply equally to independent Claims 15, 29 and 40.

Hence, Applicant respectfully submits that Applicant's Claims 1, 15, 29 and 40 are therefore patentable over Schneck et al. and Davis under 35 U.S.C. 103.

B) Claims 2 and 16:

As to dependent Claims 2 and 16, the Examiner states that Schneck et al. as modified by Davis teaches that the "wireless interface comprises an RF interface".

However, as discussed above, neither Schneck et al. nor Davis show or suggest 1) any "computer processor mounted in said portable data storage cartridge" (emphasis added), 2) "a user table comprising at least a <u>unique user identifier</u> for each authorized user and at least one permitted activity said user is authorized to conduct ***, <u>when combined with a user authentication message from said authorized user</u> in accordance with a predetermined algorithm, <u>authorizes said user</u>" (emphasis added), or, 3) "said computer processor having a user table comprising at least a unique user identifier for each authorized user and at least one <u>permitted activity</u> said user is authorized to conduct <u>with respect to said data storage media</u>" (emphasis added) as defined in Claim 1, or in Claim 15, from which Claims 2 and 16 respectfully depend.

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Further, since it is not possible for either Schneck et al. nor Davis to show or suggest "transmitting said user authorization or denial to said data storage drive via said wireless interface" (Claim 1), as discussed above, any frequency of a wireless interface of Davis is submitted to be irrelevant.

Hence, Applicant respectfully submits that Applicant's Claims 2 and 16 are therefore patentable over Schneck et al. and Davis under 35 U.S.C. 103.

C) Claims 3, 17, 30 and 41:

As to dependent Claims 3, 17, 30 and 41, the Examiner states that Schneck et al. as modified by Davis teaches that "each the user identifier comprises a user symbol and a user decrypting key *** wherein the user authentication message which may be decrypted by the user decrypting key, and wherein the computer processor conducts the combination by decrypting the user authentication message by the user decrypting key ***."

However, as discussed above, neither Schneck et al. nor Davis shows or suggests "a user table comprising at least a unique user identifier for each authorized user and at least one permitted activity said user is authorized to conduct ***, when combined with a user authentication message from said authorized user in accordance with a predetermined algorithm, authorizes said user" (emphasis added) as defined in Claim 1.

Rather, as pointed out by the accompanying Declaration under Rule 1.132, "Davis shows an address-like initialization access code to address a particular memory location of the device, but shows nothing directed to a user identifier. *** Schneck shows a passive use of 'a particular user or group or class of users' in a 'permission list' of the rules, but shows no user identifier for enabling authorization." (Emphasis added).

Hence, any decryption of data or of rules of Schneck et al. is submitted to only be related to the "passive use" above, and not an enabling "combination" for authorization of Claims 3, 17, 30 and 41. Applicant respectfully submits that, thus, Schneck et al. fails to show or suggest, and teaches away from (e.g. Claim 3) a "user identifier comprises a user symbol and a user decrypting key, wherein said user authentication message comprises an encrypted user authentication message which may be decrypted by said user decrypting key, and wherein said computer processor conducts said combination by decrypting said user authentication message by said user decrypting key."

Therefore, Applicant respectfully submits that Applicant's Claims 3, 17, 30 and 41 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

D) Claims 4, 18, 31 and 42:

As to dependent Claims 4, 18, 31 and 42, the Examiner states that Schneck et al. as modified by Davis teaches that "the user decrypting key comprises a sender public key, and wherein the predetermined algorithm comprises a public key cryptographic algorithm".

However, as discussed above, Schneck et al. fails to show or suggest a "user identifier comprises a user symbol and a user decrypting key, *** an encrypted user authentication message which may be decrypted by said user decrypting key, and wherein said computer processor conducts said combination by decrypting said user authentication message by said user decrypting key", and therefore is submitted to fail to show or suggest (e.g. Claim 4) "said user decrypting key comprises a sender public key, and wherein said predetermined algorithm comprises a public key cryptographic algorithm."

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Therefore, Applicant respectfully submits that Applicant's Claims 4, 18, 31 and 42 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

E) Claims 5, 19, 32 and 43:

As to dependent Claims 5 and 19, the Examiner states that Schneck et al. as modified by Davis teaches that a "user authentication message is encrypted by a sender private key and a receiver public key, and wherein the public key cryptographic algorithm decrypts the user authentication message employing a receiver private key and the sender public key ***".

The Examiner makes a similar statement regarding Claims 32 and 43.

However, Schneck et al. generally discusses encryption, but only encrypts the data and rules, and not for authorization. As pointed out above, and by the accompanying Declaration under Rule 1.132, "Davis shows an address-like initialization access code to address a particular memory location of the device, but shows nothing directed to a user identifier. *** Schneck shows a passive use of 'a particular user or group or class of users' in a 'permission list' of the rules, but shows no user identifier for enabling authorization." (Emphasis added).

Hence, any decryption of data or of rules of Schneck et al. is submitted to only be related to the "passive use" above, and not an enabling "combination" for authorization. Applicant respectfully submits that Schneck et al. fails to show or suggest, and teaches away from (e.g. Claim 5) "wherein said user authentication message is encrypted by a sender private key and a receiver public key, and wherein said public key cryptographic algorithm decrypts said user authentication message employing a receiver private key and said sender public key, whereby said

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user authentication message is known to have come from said user."

Therefore, Applicant respectfully submits that Applicant's Claims 5 and 19, and Claims 32 and 43 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

F) Claims 6, 20, 33 and 44:

As to dependent Claims 6, 20 and 44, the Examiner states that Schneck et al. as modified by Davis teaches that the "user table permitted activities comprise *** 5) add entries to the user table, and 6) change/delete entries to the user table ***".

The Examiner makes a similar statement regarding Claim 33.

However, as pointed out by the accompanying Declaration under Rule 1.132, "Access management: In the '899 patent application, the permitted activities include changes to future access as well as changes to the data. *** Davis has no ability to manage access. Schneck shows a distribution system under the control of fixed rules with no ability of the user to change, and is read-only with respect to the data at the media. The user may only make changes to the data in use of the data and not to the original data of the media." (Emphasis added).

Thus, Applicant respectfully submits that Schneck et al.
fails to show or suggest, and teaches away from (e.g. Claim 6)
"said computer processor user table permitted activities comprise
a plurality of permitted activities, selected ones of which each
of said users may be authorized to conduct, said permitted
activities comprising 1) read access to data stored in said data
storage media, 2) write access to data stored in said data
storage media, 3) read the user entry of said user table, 4) read
all entries of said user table, 5) add entries to said user
table, and 6) change/delete entries to said user table."

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Therefore, Applicant respectfully submits that Applicant's Claims 6, 20, 33 and 44 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

G) Claims 7, 21, 34, 45, 8, 22, 35, 46, 9 and 23:

As to dependent Claims 7, 21 and 45, the Examiner states that Schneck et al. as modified by Davis teaches that the "user table comprises a separate entry for each the user identifier and the permitted activity the user is authorized to conduct ***". The Examiner makes a similar statement regarding Claim 34.

As to dependent Claims 8, 22 and 46, the Examiner states that Schneck et al. as modified by Davis teaches that the "user table comprises a separate entry for each the user identifier and the entry comprising all the permitted activities the user is authorized to conduct ***". The Examiner makes a similar statement regarding Claim 35.

As to dependent Claims 9 and 23, the Examiner states that Schneck et al. as modified by Davis teaches that the "computer processor additionally comprises a nonvolatile memory storing the user table ***".

However, as discussed above with respect to Claim 1 et al., neither Schneck et al. nor Davis show or suggest 2) "a user table comprising at least a <u>unique user identifier</u> for each authorized user and at least one permitted activity said user is authorized to conduct ***, when combined with a user authentication message from said authorized user in accordance with a predetermined algorithm, <u>authorizes said user</u>" (emphasis added), or, 3) "said computer processor having a user table comprising at least a unique user identifier for each authorized user and at least one <u>permitted activity</u> said user is authorized to conduct <u>with</u> respect to said data storage media" (emphasis added) as defined in Claim 1, from which Claims 7, 8 and 9 depend, or in Claim 15,

from which Claims 21, 22 and 23 depend, or in Claim 29, from which Claims 34 and 35 depend or in Claim 40, from which Claims 45 and 46 depend. Hence, Applicant respectfully submits that neither Schneck et al. nor Davis show or suggest, and that they teach away from, a "user table" of Applicant's invention.

Applicant further respectfully submits that Schneck et al., having no "user table" as above, also fails to show or suggest, and teaches away from (e.g. Claim 7) "said computer processor user table comprises a separate entry for each said user identifier and said permitted activity said user is authorized to conduct."

Therefore, Applicant respectfully submits that Applicant's Claims 7, 21, 34 and 45 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

Applicant still further respectfully submits that Schneck et al., having no "user table" as above, also fails to show or suggest, and teaches away from (e.g. Claim 8) "said computer processor user table comprises a separate entry for each said user identifier, said entry comprising all said permitted activities said user is authorized to conduct."

Therefore, Applicant respectfully submits that Applicant's Claims 8, 22, 35 and 46 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

Applicant additionally respectfully submits that Schneck et al., having no "user table" as above, also fails to show or suggest, and teaches away from (e.g. Claim 9) "said computer processor additionally comprises a nonvolatile memory storing said user table."

Therefore, Applicant respectfully submits that Applicant's Claims 9 and 23 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

H) Claims 10, 24, 36, 47, 11, 25, 37, 48, 13 and 27:

As to dependent Claims 10, 24, 36 and 47, the Examiner states that Schneck et al. as modified by Davis teaches that the "class table comprising at least a unique class identifier for each authorized class of users and at least one permitted activity the class of users is authorized to conduct with respect to the data storage media, the class identifier, when combined with a user authentication message from a user ***, authorizes the user ***, upon receiving the user authentication messages from the data storage drive via the wireless interface (see Davis ***), combining the user authentication message with the class identifier from the class table in accordance with the predetermined algorithm to authorize or deny the class activity to the user ***, and transmitting the class authorization or denial to the data storage drive via the wireless interface (see Davis ***)."

As to dependent Claims 11, 25, 37 and 48, the Examiner states that Schneck et al. as modified by Davis teaches that the "user table additionally comprises any class membership of each the user, wherein the user may be authorized with respect to the class table either by the class authorization or by the user authorization ***".

As to dependent Claims 13 and 27, the Examiner states that Schneck et al. as modified by Davis teaches that the "computer processor additionally comprises a nonvolatile memory storing the user table ***".

However, as discussed above with respect to Claim 1 et al., neither Schneck et al. nor Davis show or suggest 2) "a user table comprising at least a <u>unique user identifier</u> for each authorized user and at least one permitted activity said user is authorized to conduct ***, when combined with a user authentication message

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from said authorized user in accordance with a predetermined algorithm, authorizes said user" (emphasis added), or, 3) "said computer processor having a user table comprising at least a unique user identifier for each authorized user and at least one permitted activity said user is authorized to conduct with respect to said data storage media" (emphasis added) as defined in Claim 1, from which Claims 10, 11 and 13 depend, or in Claim 15, from which Claims 24, 25 and 27 depend, or in Claim 29, from which Claims 36 and 37 depend or in Claim 40, from which Claims 47 and 48 depend.

Applicant's class table is directly related to Applicant's user table, and comprises (e.g., Claim 10) "at least a unique class identifier for each authorized class of users and at least one permitted activity said class of users is authorized to conduct with respect to said data storage media". Hence, Applicant respectfully submits that the same issue is present, and therefore neither Schneck et al. nor Davis show or suggest, and that they teach away from, a "class table" of Applicant's invention.

Therefore, Applicant respectfully submits that Applicant's Claims 10, 24, 36 and 47 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

Applicant further respectfully submits that Schneck et al., having no "user table" and no "class table" as above, also fails to show or suggest, and teaches away from the (e.g. Claim 11) "user table additionally comprises any class membership of each said user, wherein said user may be authorized with respect to said class table either by said class authorization or by said user authorization."

Therefore, Applicant respectfully submits that Applicant's Claims 11, 25, 37 and 48 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

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Applicant additionally respectfully submits that Schneck et al., having no "user table" and no "class table" as above, also fails to show or suggest, and teaches away from (e.g. Claim 13) "said computer processor additionally comprises a nonvolatile memory storing said user table and said class table."

Therefore, Applicant respectfully submits that Applicant's Claims 13 and 27 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

I) Claims 12, 26, 38 and 49:

As to dependent Claims 12, 26 and 49, the Examiner states that Schneck et al. as modified by Davis teaches that the "user table and the class table permitted activities comprise *** 5) add entries to the user table, and 6) change/delete entries to the user table ***".

The Examiner makes a similar statement with regard to Claim 38.

However, as pointed out by the accompanying Declaration under Rule 1.132, "Access management: In the '899 patent application, the permitted activities include changes to future access as well as changes to the data. *** Davis has no ability to manage access. Schneck shows a distribution system under the control of fixed rules with no ability of the user to change, and is read-only with respect to the data at the media. The user may only make changes to the data in use of the data and not to the original data of the media." (Emphasis added).

Thus, Applicant respectfully submits that Schneck et al. and Davis, in addition to failing to show a user table or a class table, as discussed above, also fail to show or suggest, and teaches away from (e.g. Claim 12) "computer processor user table and said class table permitted activities comprise a plurality of

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permitted activities, selected ones of which each of said users may be authorized to conduct, said permitted activities comprising 1) read access to data stored in said data storage media, 2) write access to data stored in said data storage media, 3) read all entries of said class table, 4) add entries to said class table, and 5) change/delete entries to said class table."

Therefore, Applicant respectfully submits that Applicant's Claims 12, 26, 38 and 49 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

J) Claims 14, 28, 39 and 50:

As to dependent Claims 14, 28, 39 and 50, the Examiner states that Schneck et al. as modified by Davis teaches that "the data stored in the data storage media is encrypted ***, wherein the computer processor user table permitted activities comprise at least 1) read access ***, and wherein the user authorization for the read access additionally comprises a decryption key for the encrypted stored data ***."

However, as pointed out above, neither Schneck et al. nor Davis shows or suggests a "user table" related to authorizing a user. More specifically, as pointed out above with respect to Claim 1, neither Schneck et al. nor Davis shows or suggests "a user table comprising at least a <u>unique user identifier</u> for each authorized user and at least one permitted activity said user is authorized to conduct ***, <u>when combined with a user authentication message from said authorized user in accordance with a predetermined algorithm, <u>authorizes said user</u>".</u>

Although Schneck et al. generally discusses encryption with respect to encrypting the data and rules, there is no showing nor suggestion of authorization of the user.

Hence, Applicant respectfully submits that Schneck et al. and Davis fail to show or suggest, and teaches away from (e.g. Claim 14) "wherein said data stored in said data storage media is encrypted, wherein said computer processor user table permitted activities comprise at least 1) read access to data stored in said data storage media, and wherein said user authorization for said read access additionally comprises a decryption key for said encrypted stored data."

Therefore, Applicant respectfully submits that Applicant's Claims 14, 28, 39 and 50 are patentable over Schneck et al. and Davis under 35 U.S.C. 103.

Additional Art:

The additional references cited by the Examiner have been examined and as best understood, do not teach or suggest Applicant's claimed invention. The Examiner cited USPN 5,889,866, Cyras et al.; USPN 5,982,520, Weiser et al.; USPN 6,092,201, Turnbull et al.; and USPN 6,446,206 B1, Feldbaum. Applicants submit that none of the cited patents teach, either singly or in combination, the present invention as described and claimed in Applicant's Claims 1-50.

Accordingly, Applicants believe the present invention distinguishes over the cited patents and respectfully requests that the Examiner allow Applicant's Claims 1-50 under 35 U.S.C. 103.

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SUMMARY:

Applicant has unbolded the title and shortened the Abstract as required by the Examiner, without the submission of new matter.

Applicants respectfully submit that the present invention distinguishes over the cited patents and respectfully requests that the Examiner allow Applicant's Claims 1-50 under 35 U.S.C. 103.

> Respectfully submitted, P. J. Seger

By:

John H. Holcombe, (#20,620)

Attorney for Applicants

From: IBM Corporation

Intellectual Property Law

8987 E. Tanque Verde Rd. #309-374

Tucson, AZ 85749-9610

Telephone: (520) 760-6629

JHH/cw

Attachments: Declaration